GENERAC

The Reliable Ones

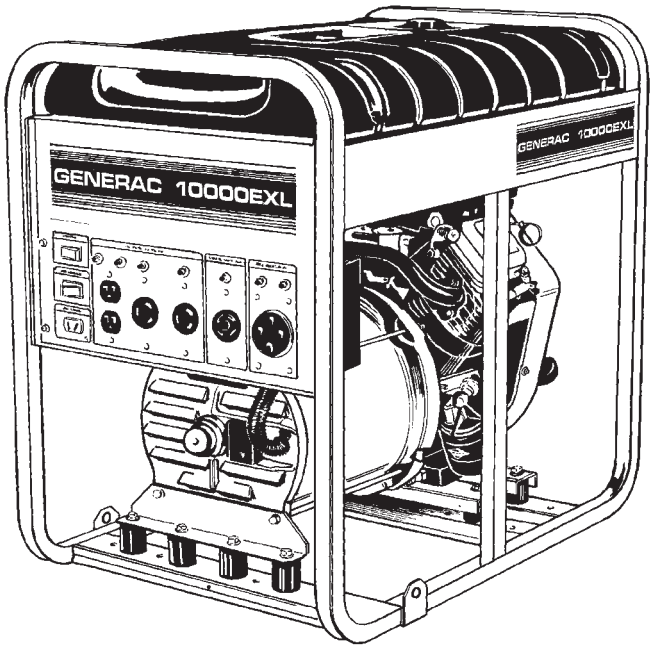
10000EXL

Portable Generator Owner's Manual

DANGER! This generator is designed for outdoor use only. **Never** use this generator inside any building or enclosure including the generator compartment of a recreational vehicle (RV). **Carbon monoxide poisoning, fire and/or an explosion may result.** No user performed modifications, including venting of exhaust and/or cooling ventilation, will eliminate the danger. Always have at least two feet of clearance on all sides of the generator even while operating the unit outdoors.

DANGER! You must isolate the generator from the electric utility by opening the electrical system's main circuit breaker or main switch if this unit is used for backup power. **Failure to isolate the generator from the power utility may result in injury or death to electric utility workers and damage to the generator** due to a backfeed of electrical energy.

The Emission Control System for this generator is warranted for standards set by the Environmental Protection Agency. For warranty information refer to the Engine Owner's manual.



Problems? Questions?
Before taking your unit back to the store, call the generator helpline at
1-800-270-1408
M–F 8–5 CT

Model No. 9801–4 (10,000 Watt AC Generator) Manual No. B4428 Revision 2 (8/11/1999)

Visit our Generac website: **www.generac–portables.com**

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

EQUIPMENT DESCRIPTION

This generator is an engine–driven, revolving field, alternating current (AC) generator. It was designed to supply electrical power for operating compatible electrical lighting, appliance, tool and motor loads. This manual contains information for a generator that operates 120 and/or 240 Volt, single phase, 60Hz devices that require up to 10,000 watts (10 kW) of power that pull up to 83.3 Amps at 120 Volts or 41.7 Amps at 240 Volts.

CAUTION! Do not exceed the generator's wattage/amperage capacity. Add up the rated watts of all devices you are connecting to generator receptacles at one time. This total should not be greater than 10,000 watts for this generator. In most cases rated watts of the electrical device can be found on the device nameplate. If the device nameplate gives only Volts and Amps, multiply Volts times Amps to obtain watts (Volts x Amps = watts).

The generator's revolving field is driven at about 3600 rpm by a twin–cylinder engine.

Every effort has been expended to make sure that the information in this manual is both accurate and current. However, Generac reserves the right to change, alter or otherwise improve the product at any time without prior notice.

DANGER! Do not tamper with engine governed speed. High operating speeds are dangerous and increase the risk of personal injury or damage to equipment. The generator supplies correctly rated frequency and voltage only when running at proper governed speed. Incorrect frequency and/or voltage can damage some connected electrical loads. Operating at excessively low speeds imposes a heavy load and, when adequate engine power is not available, may shorten engine life.

SAFETY RULES

This generator set was designed and manufactured for specific applications. Do not attempt to modify the unit or use it for any application it was not designed for. If you have any questions about your generator's application, ask your Dealer/Distributor or consult the factory.

The manufacturer could not possibly anticipate every circumstance that might involve a hazard. For that reason warnings in the Manual and warnings on tags or decals affixed to the unit are not all–inclusive. If you intend to handle, operate or service the unit by a procedure or method not specifically recommended by the manufacturer, first make sure that such a procedure or method will not render this equipment unsafe or pose a threat to you and others.

Read this manual carefully and become familiar with your generator set. Know its applications, its limitations and any hazards involved.

WARNING:

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

DANGER! You must isolate the generator from the electric utility by opening the electrical system's main circuit breaker or main switch if this unit is used for backup power. **Failure to isolate the generator from the power utility may result in injury or death to electric utility workers and damage to the generator** due to a backfeed of electrical energy.

DANGER! Generator exhaust gases contain DEADLY carbon monoxide gas. Carbon monoxide, if breathed in sufficient concentrations, can cause unconsciousness or death. Operate this equipment outdoors where adequate ventilation is available.

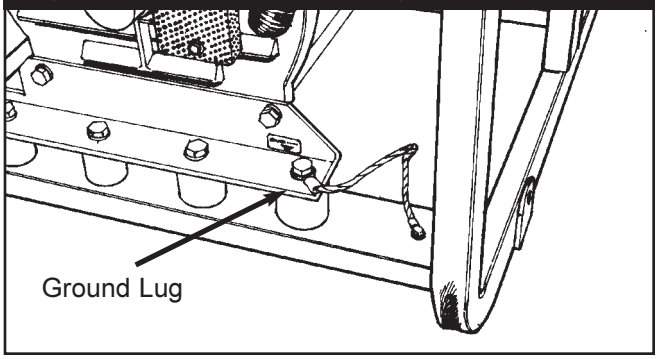
- The generator produces a very powerful voltage that can cause serious injury or death by electrocution. Never touch bare wires or receptacles. Never permit a child or any unqualified person to operate the generator.
- Never handle any kind of electrical cord or device while standing in water, while barefoot or while hands or feet are wet. Death or serious injury from electrocution may result.
- Use a ground fault circuit interrupter (GFCI) in any damp or highly conductive area (such as metal decking or steel work).
- Never use worn, bare, frayed or otherwise damaged electrical cords with the generator. Death, serious injury and property damage from electrical shock may result.
- **Gasoline is highly FLAMMABLE and its vapors are EXPLOSIVE. Never allow smoking, open flames, sparks or heat in the vicinity while handling gasoline.** Avoid spilling gasoline on a hot engine. Comply with all laws regulating storage and handling of gasoline.
- Do not overfill the fuel tank. Always allow room for fuel expansion. **If tank is overfilled, fuel can overflow onto a hot engine and cause a FIRE or an EXPLOSION.**
- Never store a generator with fuel in the tank where gasoline vapors might reach an open flame, spark or pilot light (as on a furnace, water heater, clothes dryer). FIRE or an EXPLOSION may result.
- The engine–generator requires an adequate flow of cooling air for its continued proper operation. Never operate the unit inside any room or enclosure where the free flow of cooling air into and out of the unit might be obstructed. Allow at least 2 feet of clearance on all sides of generator, even while operating unit outdoors, or you could damage the unit.
- Never start, or stop, the engine–generator with electrical loads connected to receptacles with the connected devices turned ON. Start the engine and let it stabilize before connecting any electrical loads. Disconnect all electrical loads before shutting down the generator.
- Do not insert any object through cooling slots of the engine. You could damage the unit or injure yourself.
- **Never operate the generator:**

(a) in rain;
(b) in any enclosed compartment;
(c) if connected electrical devices overheat;
(d) if electrical output is lost;
(e) if engine or generator sparks;
(f) if flame or smoke is observed while unit is running;
(g) if unit vibrates excessively.

GROUNDING THE GENERATOR

The National Electric Code requires the frame and external electrically conductive parts of the generator be properly connected to approved earth ground. Local electrical codes may also require proper grounding of the unit. For this purpose, a ground lug (Figure 1) is provided on the cradle.

Figure 1 — Location of Ground Lug



Generally, connecting a No. 12 AWG (American Wire Gauge) stranded copper wire to the ground lug screw and to an earth–driven copper or brass grounding rod (electrode) provides adequate protection against electrical shock. However, local codes may vary widely. Consult with a local electrician for grounding requirements in your area. Be sure to keep the ground wire attached while you connect the electrode.

Properly grounding the generator helps prevent electrical shock if ground fault conditions exists in the generator or in connected electrical devices. Proper grounding also helps dissipate static electricity, which often builds up in ungrounded devices.

Your generator requires some assembly and is ready for use after it has been properly serviced with the recommended oil and fuel.

If you have any problems with the assembly of your generator, please call the Generator Helpline at **1–800–270–1408**

IMPORTANT: Any attempt to run the engine before it has been serviced with the recommended oil will result in an engine failure.

TO REMOVE GENERATOR FROM CARTON

- Set the palleted carton on a rigid flat surface.
- Carefully cut bands around the shipping carton.
- Lift carton off the generator. Review Cold Weather Operation on page 8.
- Remove all packing material, carton fillers, etc.
- Remove the generator from the shipping pallet.

CARTON CONTENTS

Check all contents. If any parts are missing or damaged, call the Generator Helpline at **1–800–270–1408.** Contents include:

- 10,000 Watt Generator
- Owner's Manual
- Engine Manual
- Owner's Registration Card
- 2 Bottles of Engine Oil (28 oz.)
- 125 Volt, 30 Amp Plug
- 125 Volt, 20 Amp Plug
- 240 Volt, 30 Amp Plug
- Battery Charge Cable
- Oil Fill Funnel
- Wheel Kit

ASSEMBLE WHEEL KIT

IMPORTANT: This wheel kit is not intended for over–the–road use.

To install your wheel kit you need the following tool:

- 13 mm box, open end, or socket wrench

Install Wheel Kit as follows:

1. Place the bottom of the generator cradle on a flat, even surface. It may help assembly if you temporarily raise cradle on blocks.
2. Slide axle (Item 9) through both axle mounting brackets on cradle frame, as shown in Figure 2.
3. Slide a wheel spacer (Item 10) over each end of the axle.
4. Install the wheel (Item 11) as shown. Slide a flat washer (Item 12) over the axle, then secure the wheel with a retaining pin (Item 13).

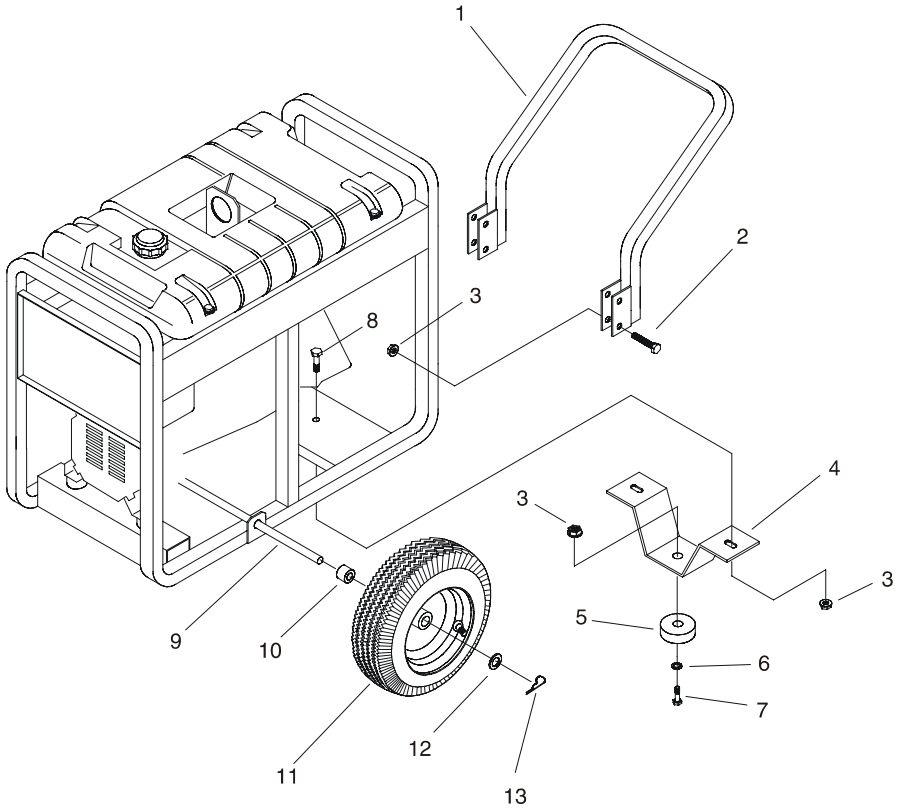
NOTE: Be sure to install each wheel with the air pressure valve on the outboard side.

5. Install the other wheel in the same manner.
6. Secure the vibration mount (Item 5) to the support leg (Item 4) with a lock nut (Item 3), a flat washer (Item 6) and a 30 mm long cap screw (Item 7).
7. Secure the support leg assembly to the cradle with 20 mm long capscrews (Item 8) and lock nuts (Item 3). If your unit has weldnuts assembled to the cradle, assemble with 20 mm cap screws, lock washers, and flat washers.

8 Position the handle (Item 1) on the cradle end opposite the control panel, as shown. Attach the handle with the cap screws (Item 2) and lock nuts (Item 3).

9. Tighten all lock nuts with the 13 mm wrench. Make sure all components are secure.

Figure 2 — Assemble Wheel Kit



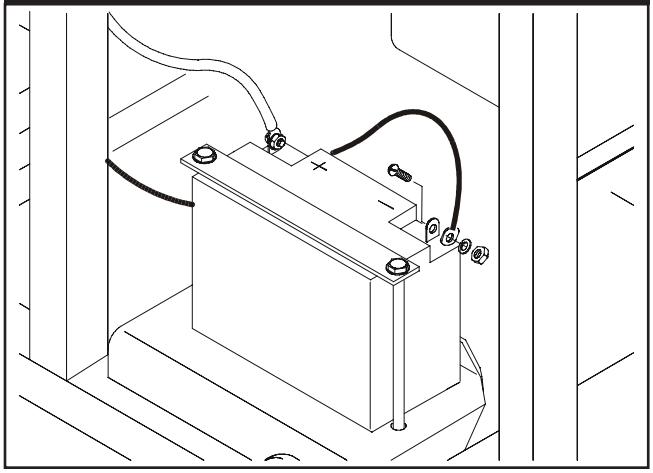
CHECK BATTERY / ATTACH NEGATIVE BATTERY WIRE

The battery on the generator is fully charged, sealed and pre–installed except for the negative (black) battery cable.

To install:

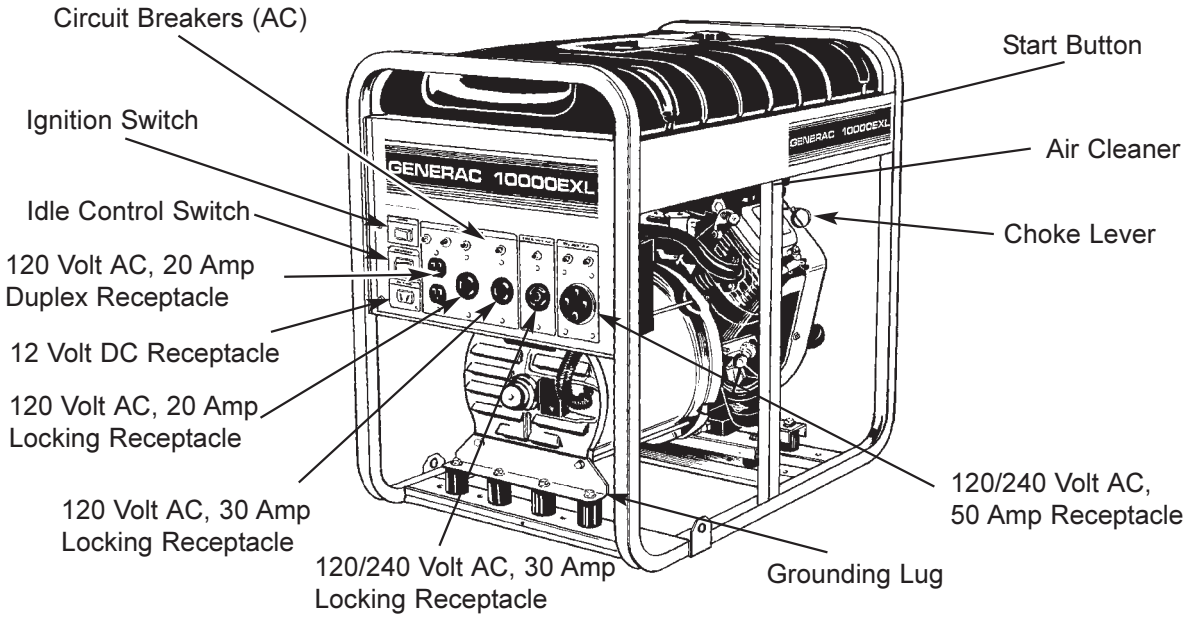
- Cut off tie wrap on negative (black) cable attached to the battery hold down.
- Remove nut on the negative battery terminal.
- Slide the negative battery cable over the screw on the negative terminal (Figure 3).
- Reattach nut and tighten.
- Ensure the connections to the battery and generator and tight and secure.

Figure 3 — Negative Battery Connection



KNOW YOUR GENERATOR

Read this owner's manual and safety rules before operating your generator.
Compare the illustrations with your generator to familiarize yourself with the locations of various controls and adjustments. Save this manual for future reference.



12 Volt DC Receptacle — Use this receptacle with battery charge cables to charge a 12 Volt battery.

120 Volt AC, 20 Amp Duplex Receptacle — May be used to supply electrical power for the operation of 120 Volt AC, single phase, 60 Hz, AC electrical lighting, appliance, tool and motor loads.

120 Volt AC, 20 Amp Locking Receptacle — May be used to supply electrical power for the operation of 120 Volt AC, 20 Amp, single phase, 60 Hz electrical lighting, appliance, tool and motor loads.

120 Volt AC, 30 Amp Locking Receptacle — May be used to supply electrical power for the operation of 120 Volt AC, 30 Amp, single phase, 60 Hz electrical lighting, appliance, tool and motor loads.

120/240 Volt AC, 30 Amp Locking Receptacle — May be used to supply electrical power for the operation of 120 and/or 240 Volt AC, 30 Amp, single phase, 60 Hz electrical lighting, appliance, tool and motor loads.

120/240 Volt AC, 50 Amp Receptacle — May be used to supply electrical power for the operation of 120/240 Volt AC, 50 Amp, single phase, 60 Hz electrical loads.

Air Cleaner — Used to limit the amount of dirt and dust that gets in the engine.

Choke Lever — Used when starting a cold engine.

Circuit Breakers (AC) — Each receptacle is provided with a circuit breaker to protect the generator against electrical overload. Breakers are "push to reset" type.

Grounding Lug — Use this connection to properly ground the generator. See “Grounding the Generator” on page 3.

Idle Control Switch — The idle control runs the engine at normal (high) speeds when there is a load present and runs the engine at idle (low) speeds when a load is not present. This feature greatly improves fuel economy, extends the life of the engine, and reduces engine noise.

Ignition Switch — Must be set On (–) position to start generator. To turn off generator, set switch to the Stop (o) position.

Spark Arrestor Muffler (not shown) — Exhaust muffler lowers engine noise and is equipped with a spark arrestor screen.

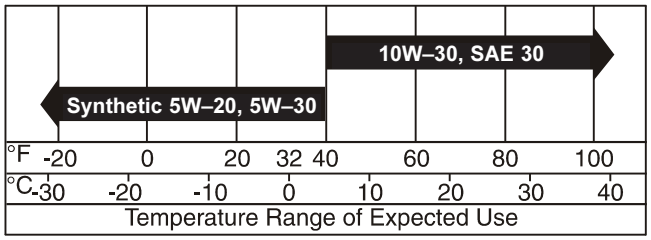
Start Button — When pressed, cranks engine to start.

BEFORE STARTING THE ENGINE

Add Engine Oil

Note: When adding oil to the engine crankcase in the future, use only high quality detergent oil rated with API service classification SF and SG rated SAE 30 weight. Use no special additives. **DO NOT USE SAE 10W–40.**

Select the oil's viscosity grade according to your expected operating temperature:



- **Above 40°F,** use SAE 10W–30 or SAE 30.
- **Below 40°F,** use synthetic 5W–20 or 5W–30.

To add oil to the generator:

- Make sure unit is on a level surface.
- Clean around oil fill cap and remove it.
- Remove oil dipstick, wipe clean and reinsert in engine.
- Fill engine with oil till it reaches the full mark on the dipstick. Stop occasionally to check oil level. Do not overfill.
- Install oil dipstick.
- Install oil fill cap. Hand tighten securely.

CAUTION! Any attempt to crank or start the engine before it has been properly serviced with the recommended oil results in an engine failure.

NOTE: The generator's revolving field rides on a pre–lubricated and sealed ball bearing that requires no additional lubrication for the life of the bearing.

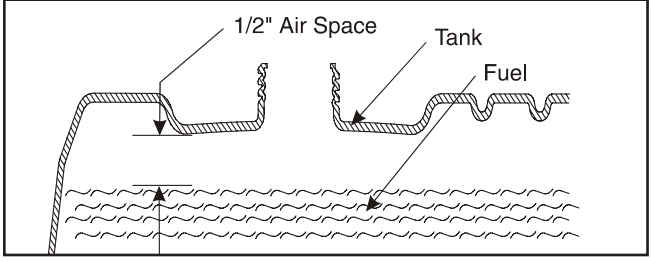
Add Gasoline

DANGER! NEVER fill fuel tank indoors. NEVER fill fuel tank when engine is running or hot. DO NOT light a cigarette or smoke when filling the fuel tank.

DANGER! Do not overfill the fuel tank. Always leave room for expansion.

- Use **regular UNLEADED gasoline** in the generator. DO NOT use premium gasoline. DO NOT mix oil with gasoline. DO NOT overfill the gas tank.
- Clean area around fuel fill cap; remove cap.
- Fill fuel tank with clean, fresh, unleaded gasoline. Be careful not to overfill. Allow 1/2" of tank space for fuel expansion (Figure 4).

Figure 4 — Fuel Level



- Install fuel cap and wipe up any spilled gasoline.

IMPORTANT: It is important to prevent gum deposits from forming in essential fuel system parts such as the carburetor, fuel filter, fuel hose or tank during storage. Also, experience indicates that alcohol–blended fuels (called gasohol, ethanol or methanol) can attract moisture, which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage. To avoid engine problems, the fuel system should be emptied before storage of 30 days or longer. See "Storage" on page 13. Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.

OPERATING THE GENERATOR

CAUTION! Never start, or stop, the generator with electrical loads connected to the receptacles.

Starting the Engine

- Disconnect **all** electrical loads from the generator.
- Make sure the Idle Control Switch is turned **OFF.**
- Open the fuel shut–off valve.
- Set the Ignition Switch to the **On (–)** position.
- Pull choke control out to close choke. **Note:** If engine is warm, you may not need as much choking.

Note: Make sure the idle control switch is **"Off"** before starting the engine.

For Electric Start:

- Press electric starter switch until engine starts.

For Manual Start:

- Pull slowly on recoil handle until you feel some resistance. Then pull rapidly to start engine. Return recoil slowly, do not let it **"snap back."**

Applying Electrical Loads

- Let engine stabilize and warm up for about two minutes after starting.
- Plug in and turn on the desired 120 or 240 Volt AC, single phase, 60 Hertz electrical loads. **DO NOT OVERLOAD THE GENERATOR.** Add up the rated watts (or Amps) of all loads to be connected at one time. This total should not be greater than the rated wattage/amperage capacity of the generator. See page 12, "Don't Overload the Generator" for details.

Stopping the Engine

- Disconnect **all** electrical loads.
- Turn **OFF** idle control.
- Run engine at no–load for a few minutes.
- Set the Ignition Switch to the **Stop (o)** position.
- Close the fuel shut–off valve.

Operating Automatic Idle Control

This switch is designed to greatly improve fuel economy. When this switch is turned **ON**, the engine will only run at its normal high governed engine speed when an electrical load is connected. When an electrical load is removed, the engine will run at a reduced speed. With the switch **OFF,** the engine will run at the normal high engine speed. **Always have the switch OFF when starting and stopping the engine.**

Cold Weather Operation

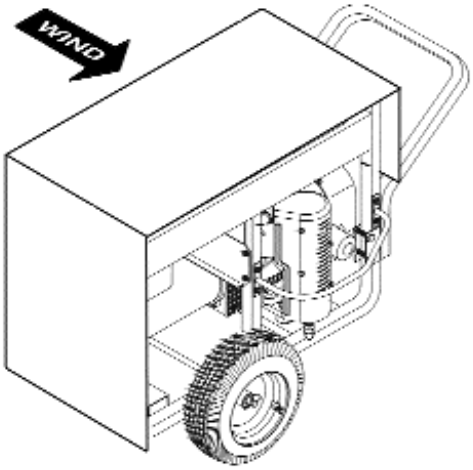
Under certain weather conditions (temperatures below 40°F [4°C] and a high dew point), your Generac generator may experience icing of the carburetor and/or the crankcase breather system.

In an emergency, use the original shipping box as a temporary shelter:

- Cut off all flaps
- Cut out one of the long sides of the box to expose exhaust side of unit. Ensure a minimum of two feet clearance between open side of box and nearest object.
- Cut appropriate slots to access receptacles of unit.
- Start unit, then place box over it, as shown in Figure 5.

IMPORTANT!: Remove shelter when temperature is above 40°F [4°C].

Figure 5 — Typical Temporary Shelter (Unit may vary)



Charging a Battery

Your generator has the capability of recharging a discharged 12 Volt automotive or utility style storage battery. **Do not** use the unit to charge any 6 Volt batteries. **Do not** use the unit to crank an engine having a discharged battery.

DANGER! Storage batteries give off explosive hydrogen gas while recharging. An explosive mixture will remain around the battery for a long time after it has been charged. The slightest spark can ignite the hydrogen and cause an explosion. Such an explosion can shatter the battery and cause blindness or other serious injury.

DANGER! Do not permit smoking, open flame, sparks or any other source of heat around a battery. Wear protective goggles, rubber apron and rubber gloves when working around a battery. Battery electrolyte fluid is an extremely caustic sulfuric acid solution that can cause severe burns. If spill occurs flush area with clear water immediately.

To recharge 12 Volt batteries, proceed as follows:

- Check fluid level in all battery cells. If necessary, add ONLY distilled water to cover separators in battery cells. **Do not use tap water.**
- If the battery is equipped with vent caps, make sure they are installed and are tight.
- If necessary, clean battery terminals.
- Connect battery charge cable connector plug to panel receptacle identified by the words "12–VOLT D.C."
- Connect battery charge cable clamp with **red** handle to the **positive (+)** battery terminal.
- Connect battery charge cable clamp with **black** handle to the **negative (–)** battery terminal.
- Start engine. Let the engine run while battery recharges.
- When battery has charged, shut down engine.

NOTE: Use an automotive hydrometer to test battery state of charge and condition. Follow the hydrometer manufacturer's instructions carefully. Generally, a battery is considered to be at 100% state of charge when specific gravity of its fluid (as measured by hydrometer) is 1.260 or higher.

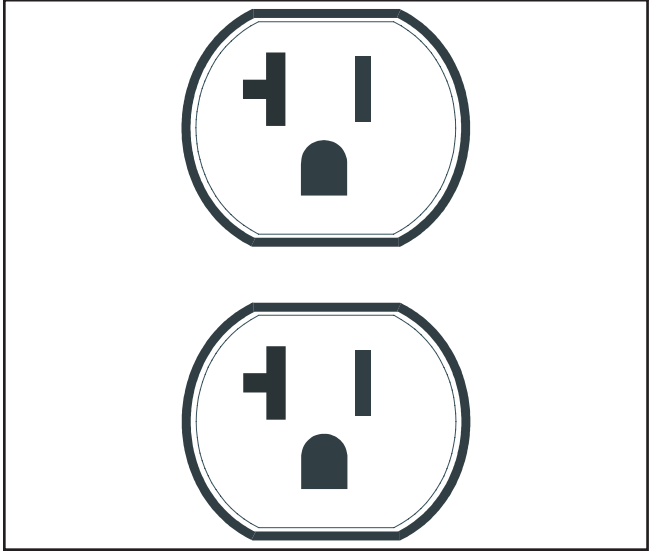
RECEPTACLES

This generator is equipped with the following receptacles:

120 Volt, 20 Amp, Duplex Receptacle

Each of these outlets is protected against overload by 20 Amp push–to–reset type circuit breakers. Use each outlet to operate 120 Volt, 60 Hz, single phase loads requiring 2400 (2.4 kW) watts at 20 Amps of current (Figure 6).

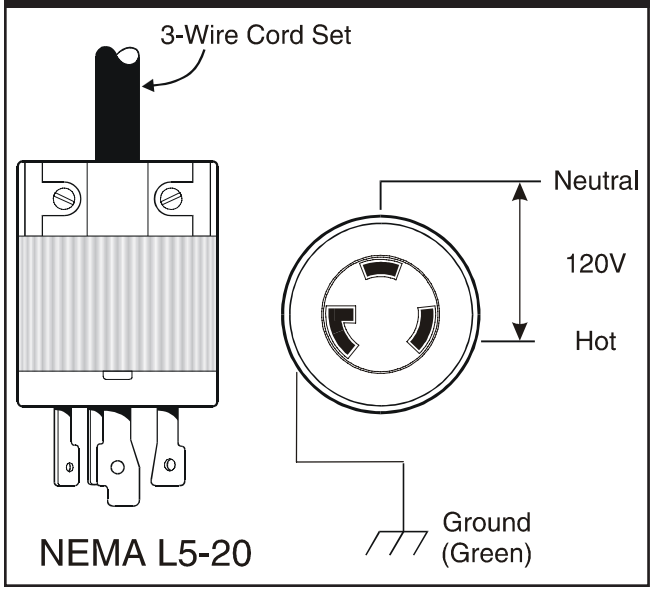
Figure 6 — 120 Volt, 20 Amp Duplex Receptacle



120 Volt, 20 Amp Locking Type Receptacle

Use a NEMA L5–20 plug with this receptacle. Connect a 3–wire cord set rated 125 Volts at 20 AC Amps to the plug (Figure 7).

Figure 7 — 120 Volt, 20 Amp, Locking Receptacle

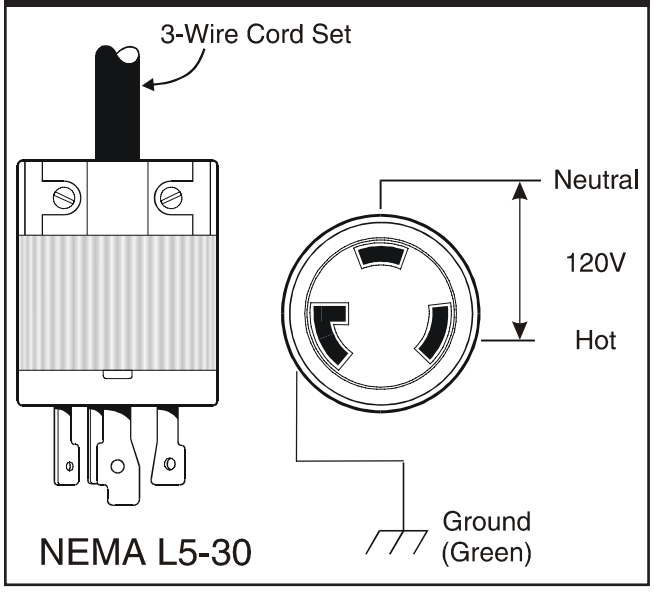


Use this receptacle to operate 120 Volt AC, 60 Hz, single phase loads requiring up to 2400 watts (2.4 kW) of power at 20 AC Amps. The outlet is protected by a 20 Amp push–to–reset circuit breaker.

120 Volt, 30 Amp Locking Type Receptacle

Use a NEMA L5–30 plug with this receptacle. Connect a 3–wire cord set rated for 125 Volts at 30 AC Amps to the plug (Figure 8).

Figure 8 — 120 Volt, 30 Amp, Locking Receptacle

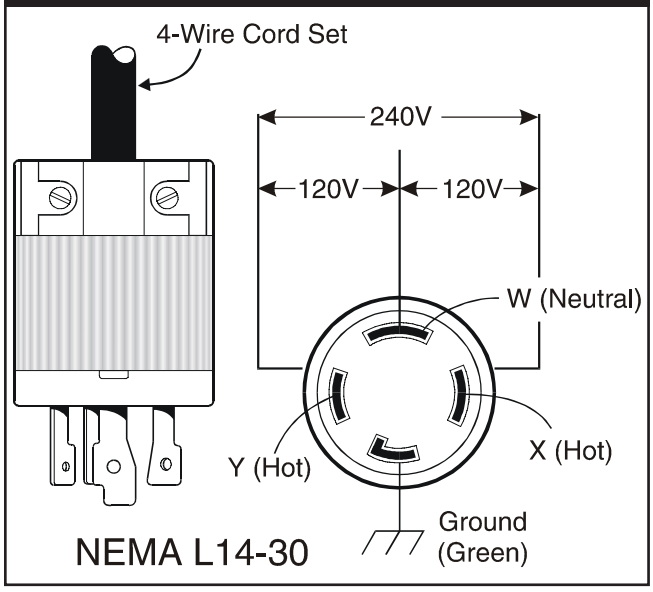


Use this receptacle to operate 120 Volt AC, 60 Hz, single phase loads requiring up to 3600 watts (3.6 kW) of power at 30 AC Amps. The outlet is protected by a 30 Amp push–to–reset circuit breaker.

120/240 Volt, 30 Amp Locking Type Receptacle

Use a NEMA L14–30 plug with this receptacle. Connect a 4–wire cord set rated 250 Volt at 30 AC Amps (or greater) (Figure 9). You can use the same 4–wire cord if you plan only to run a 120 Volt load.

Figure 9 — 120/240 Volt, 30 Amp, Locking Receptacle

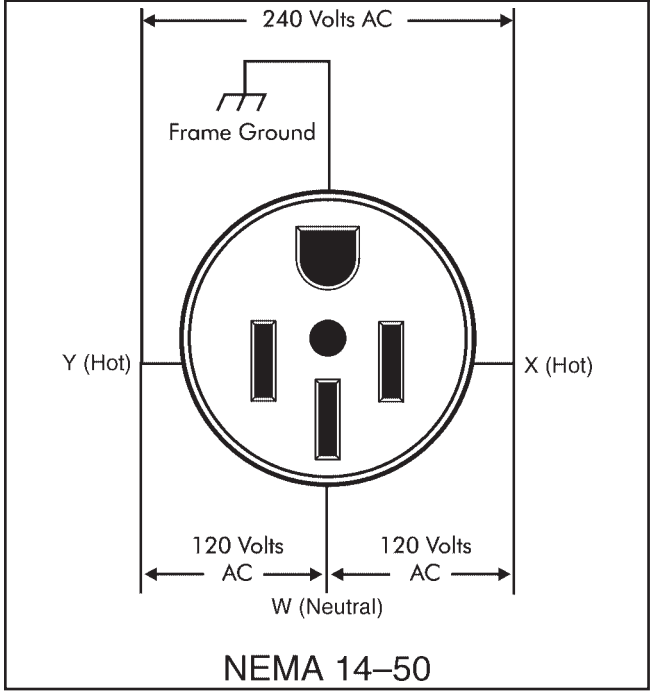


This receptacle powers 120/240 Volt AC, 60 Hz, single phase loads requiring up to 3600 watts of power (3.6 kW) at 30 AC Amps for 120 Volts; 7200 watts of power (7.2 kW) at 30 AC Amps for 240 Volts. The outlet is protected by a 30 Amp push–to–reset circuit breaker.

240 Volt, 50 Amp Receptacle

Use a NEMA 14–50 plug with this receptacle. Connect a 4–wire cord set rated for 250 Volts at 50 AC Amps to the plug (Figure 10).

Figure 10 — 120/240 Volt, 50 Amp, Receptacle



Use this receptacle to operate 240 Volts AC, 60 Hz, single phase loads requiring up to 10,000 watts (10.0 kW) of power.

CAUTION! Although this outlet states it has a 240 Volt 50 Amp rating (up to 12,500 watts), the generator is only rated for 10,000 watts. Powering loads that exceed the wattage/ Amperage capacity of the generator can damage it or cause serious injuries.

DON'T OVERLOAD THE GENERATOR

Overloading a generator in excess of its rated wattage capacity can result in damage to generator and to connected electrical devices. Observe the following, to prevent overloading the unit:

- Add up the total wattage of all electrical devices to be connected at one time. This total should **NOT** be greater than the generator's wattage capacity.
- The rated wattage of lights can be taken from light bulbs. The rated wattage of tools, appliances and motors can usually be found on a data plate or decal affixed to the device.
- If the appliance, tool or motor does not give wattage, multiply Volts times ampere rating to determine watts (volts x amps = watts).
- Some electric motors, such as induction types, require about three times more watts of power for starting than for running. This surge of power lasts for only a few seconds when starting such motors. Be sure you allow for this high starting wattage when selecting electrical devices to connect to your generator. First figure the watts needed to start the largest motor. Add to that figure the running watts of all other connected loads.
- Items in Figure 11 below are provided to help you to determine how many items the generator can operate at one time.

Figure 11 — Wattage Reference Guide

Device	Running Watts
*Air Conditioner (12,000 Btu)	1700
*Air Conditioner (24,000 Btu)	3800
*Air Conditioner (40,000 Btu)	6000
Battery Charger (20 Amp)	500
Belt Sander (3")	1000
Chain Saw	1200
Circular Saw (6–1/2")	800 to 1000
*Clothes Dryer (Electric)	5750
*Clothes Dryer (Gas)	700
*Clothes Washer	1150
Coffee Maker	1750
*Compressor (1 HP)	2000
*Compressor (3/4 HP)	1800
*Compressor (1/2 HP)	1400
Curling Iron	700
*Freezer	700
*Dehumidifier	650
Disc Sander (9")	1200
Edge Trimmer	500
Electric Blanket	400
Electric Nail Gun	1200
Electric Range (per element)	1500
Electric Skillet	1250
*Furnace Fan (3/5 HP)	875
*Garage Door Opener	500 to 750
Hair Dryer	1200
Hand Drill	250 to 1100
Hedge Trimmer	450
Impact Wrench	500
Iron	1200
*Jet Pump	800
Lawn Mower	1200
Light Bulb	100
Microwave Oven	700 to 1000
*Milk Cooler	1100
Oil Burner on Furnace	300
Oil Fired Space Heater (140,000 Btu)	400
Oil Fired Space Heater (85,000 Btu)	225
Oil Fired Space Heater (30,000 Btu)	150
*Paint Sprayer, Airless (1/3 HP)	600
Paint Sprayer, Airless (handheld)	150
Radio	50 to 200
*Refrigerator	700
Slow Cooker	200
*Submersible Pump (1–1/2 HP)	2800
*Submersible Pump (1 HP)	2000
*Submersible Pump (1/2 HP)	1500
*Sump Pump	800 to 1050
*Table Saw (10")	1750 to 2000
Television	200 to 500
Toaster	1000 to 1650
Weed Trimmer	500

* Allow 3 times the listed watts for starting these devices.

GENERAL MAINTENANCE RECOMMENDATIONS

The Owner/Operator is responsible for making sure that all periodic maintenance tasks are completed on a timely basis; that all discrepancies are corrected; and that the unit is kept clean and properly stored. **Never operate a damaged or defective generator.**

Engine Maintenance

See your engine owner's manual for information needed to maintain and service the engine.

Generator Maintenance

Generator maintenance consists of keeping the unit clean and dry. Operate and store the unit in a clean dry environment where it will not be exposed to excessive dust, dirt, moisture or any corrosive vapors. Make sure the cooling air slots in the generator do not become clogged with snow, leaves or other foreign material.

Check cleanliness of the generator frequently and clean when dust, dirt, oil, moisture or other foreign substances are visible on its exterior surface.

NOTE: DO NOT use a garden hose to clean generator. Water can enter the engine fuel system and cause problems. In addition, if water enters the generator through the cooling air slots, some water will be retained in the voids and cracks of the rotor and stator winding insulation. Water and dirt buildup on the generator internal windings will eventually decrease the insulation resistance of these windings.

To Clean the Generator

- Use a damp cloth to wipe exterior surfaces clean.
- Soft, bristle brush may be used to loosen caked on dirt or oil.
- A vacuum cleaner may be used to pick up loose dirt and debris.
- Low pressure air (not to exceed 25 psi) may be used to blow away dirt. Inspect cooling air slots and opening on generator. These openings must be kept clean and unobstructed.

STORAGE INSTRUCTIONS

The generator should be started at least once every seven days and allowed to run at least 30 minutes. If this cannot be done and you must store the unit for more than 30 days, use the following guidelines to prepare it for storage.

Generator Storage

- Clean the generator as outlined in "To Clean the Generator."
- Check that the cooling air slots and openings on the generator are open and unobstructed.
- Remove the negative battery cable from the battery to prevent the battery from being depleted.
- Change engine oil.
- Drain fuel and run engine until the fuel system is empty.
- Remove spark plugs and pour about 1 ounce of clean engine oil into spark plug holes. Crank engine over slowly several times, to distribute oil. Install and tighten spark plugs.
- Store the unit in a clean dry place.

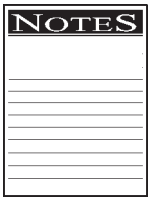
DANGER! Storage covers can be flammable. Do not place a storage cover over a hot generator. Let the unit cool for 5 minutes before placing cover on the unit.

SPECIFICATIONS

Rated Maximum Continuous AC Power Output	10,000 watts (10 kW)
Rated Voltage	120/240 Volts
Rated Maximum Current at 240 Volts	41.7 AC Amperes
Rated Maximum Current at 120 Volts	83.3 AC Amperes
Phase	1
Rated AC Frequency	60 Hertz
Number of Rotor Poles	2
Driven Speed of Rotor	3600 rpm
Battery Size	Y50–N18L–A3

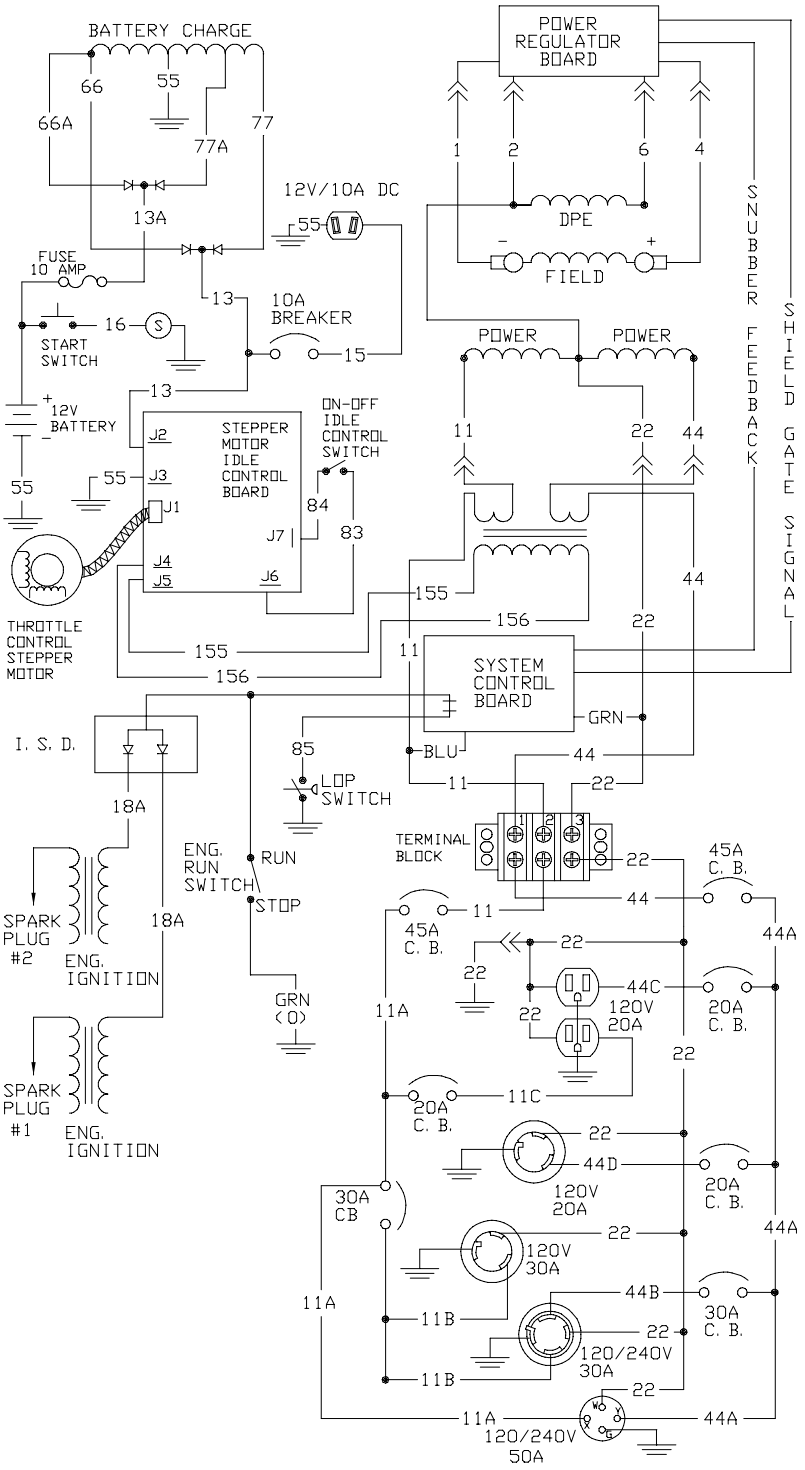
TROUBLESHOOTING

Problem	Cause	Correction
Engine is running, but no AC output is available.	1. One of the circuit breakers is open. 2. Fault in generator. 3. Poor connection or defective cord set. 4. Connected device is bad.	1. Reset circuit breaker. 2. Contact Generac service facility. 3. Check and repair. 4. Connect another device that is in good condition.
Engine runs good at no-load but “bogs down" when loads are connected.	1. Short circuit in a connected load. 2. Engine speed is too slow. 3. Generator is overloaded. 4. Shorted generator circuit.	1. Disconnect shorted electrical load. 2. Contact Generac service facility. 3. See “Don't Overload the Generator”, page 12. 4. Contact Generac service facility.
Engine will not start; or starts and runs rough.	1. Run/Stop Switch set to STOP. 2. Dirty air cleaner. 3. Out of gasoline. 4. Stale gasoline. 5. Spark plug wire not connected to spark plug. 6. Bad spark plug. 7. Water in gasoline. 8. Overchoking. 9. Excessively rich fuel mixture. 10. Intake valve stuck open or closed. 11. Engine compression lost. 12. Failed battery.	1. Set switch to RUN. 2. Clean or replace air cleaner. 3. Fill fuel tank. 4. Drain gas tank; fill with fresh fuel. 5. Connect wire to spark plug. 6. Replace spark plug. 7. Drain gas tank; fill with fresh fuel. 8. Open choke fully and crank engine. 9. Contact Generac service facility. 10. Contact Generac service facility. 11. Contact Generac service facility. 12. Replace battery.
Engine shuts down during operation.	1. Out of gasoline. 2. Low oil level.	1. Fill fuel tank. 2. Fill crankcase to proper level.
Engine lacks power.	1. Load is too high. 2. Dirty air filter.	1. See “Don't Overload the Generator”, page 12. 2. Replace air filter.
Engine “hunts” or falters.	1. Choke is opened too soon. 2. Carburetor is running too rich or too lean.	1. Move choke to halfway position until engine runs smoothly. 2. Contact Generac service facility.

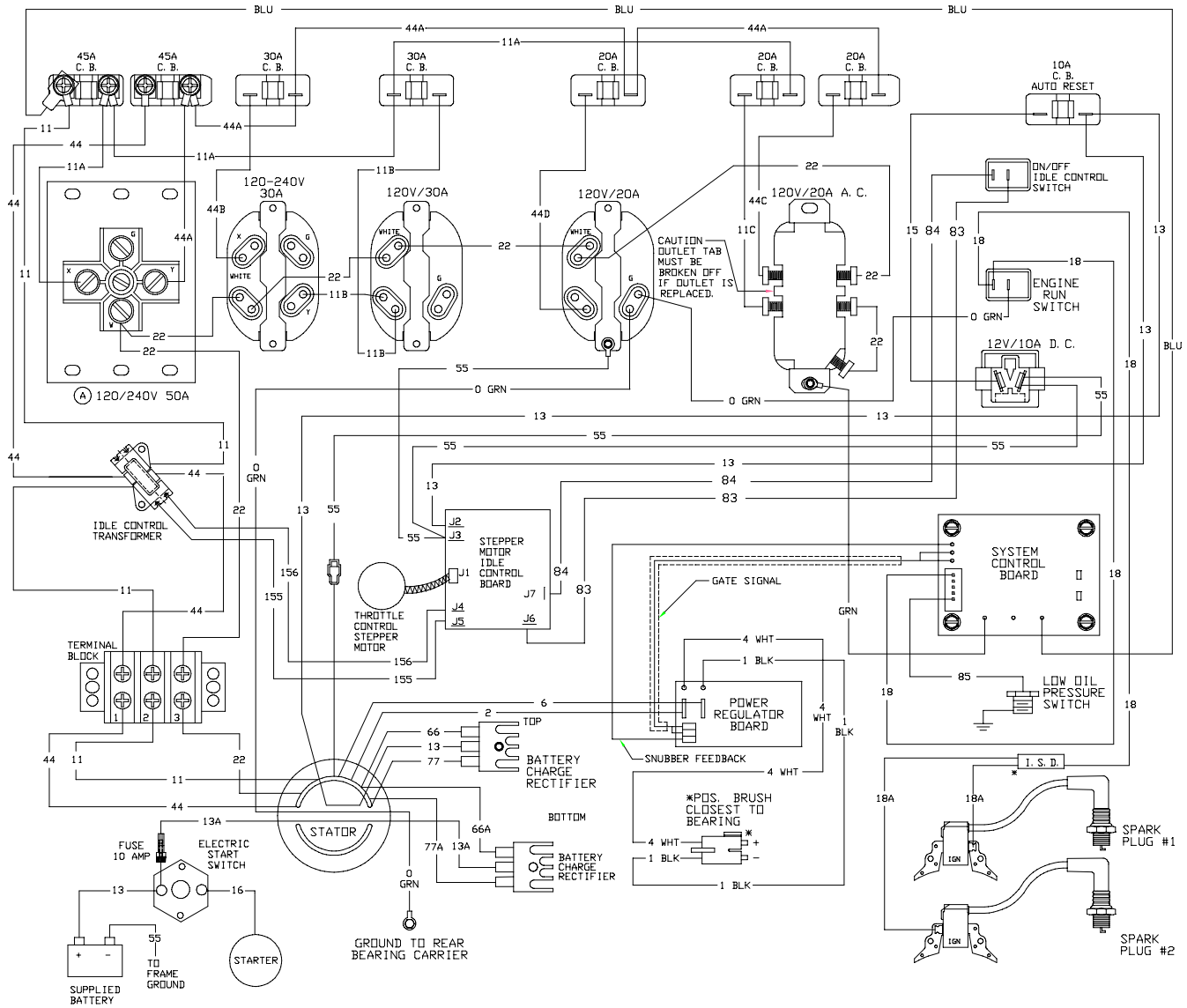


NOTES

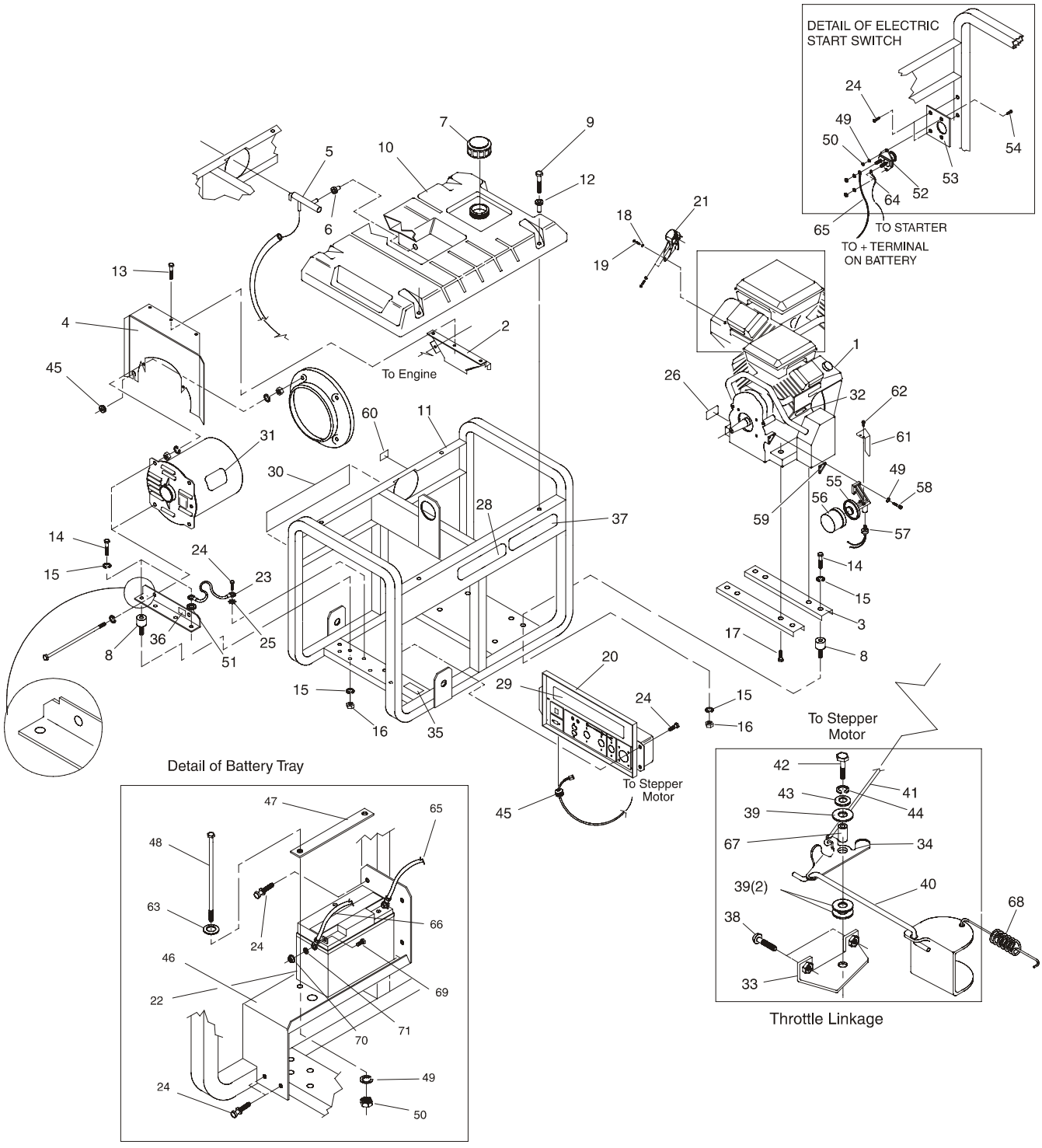
SCHEMATIC

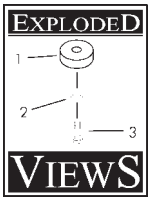

BATTERY CHARGE
66
55
66A
77
77A
13A
12V/10A DC
55
FUSE
10 AMP
13
10A
BREAKER
START
SWITCH
16
S
15
13
12V
BATTERY
55
J2
J3
J1
J4
J5
J7
J6
STEPPER
MOTOR
IDLE
CONTROL
BOARD
ON-OFF
IDLE
CONTROL
SWITCH
84
83
THROTTLE
CONTROL
STEPPER
MOTOR
155
156
POWER
REGULATOR
BOARD
1
2
6
4
DPE
FIELD
POWER
POWER
11
22
44
SNUBBER FEEDBACK
SHIELD GATE SIGNAL
SYSTEM
CONTROL
BOARD
GRN
BLU
I. S. D.
85
LOP
SWITCH
18A
ENG.
RUN
SWITCH
RUN
STOP
TERMINAL
BLOCK
45A
C. B.
44A
SPARK
PLUG
#2
ENG.
IGNITION
GRN
(G)
11A
44C
120V
20A
20A
C. B.
11C
SPARK
PLUG
#1
44D
30A
CB
120V
30A
44B
30A
C. B.
11B
120/240V
30A
120/240V
50A

WIRING DIAGRAM



GENERATOR EXPLODED VIEW





GENERATOR PARTS LIST

Item	Part #	Qty	Description
1	NSP	1	ENGINE, Generac Power Systems
2	B93074	1	SHIELD, Heat
3	A77304	2	SUPPORT, Engine
4	B90916	1	STATOR, Heat Shield
5	80270	1	VALVE, Fuel Shut-Off
6	78299	1	BUSHING, Fuel Valve
7	B4325	1	CAP, Fuel Gauge
8	38353	8	MOUNTS, Vibration
9	78831B	4	CAPSCREW, M6-1.0 x 60mm
10	B1696	1	TANK, Fuel
11	AB4137	1	CRADLE
12	83465	4	GROMMET, Fuel Tank Mounting
13	56892	3	CRIMPTITE, 10-24 x 3/8"
14	23152	8	CAPSCREW, 3/8-16 x 3/4" Lg.
15	22237	16	WASHER, 3/8" Lock
16	22241	8	NUT, 3/8-16 Hex
17	75246	4	SELF-TAPPING, 3/8-16 x 1-1/4" Lg.
18	22129	2	WASHER, M8-Lock
19	39253	2	CAPSCREW, M8-1.25 x 16
20	B4433	1	ASSEMBLY, Control Panel
21	96867	1	ASSEMBLY, Stepper Motor
22	B4489	1	BATTERY
23	185-53621	1	ASSEMBLY, Ground Wire
24	86292	11	CAPSCREW, #10 Self Driller
25	23762	1	WASHER, #10 Shakeproof
26	79661P	1	DECAL, Engine
28	92982	1	DECAL, Danger
29	B4478	1	DECAL, Control Panel
30	B4479	1	DECAL, Side Panel
31	78817	1	DECAL, Data Plate
32	77816	1	DECAL, Caution Hot Muffler
33	95349	1	PLATE, Adjust
34	95348	1	BELL, Crank
35	20566	1	DECAL, 1-800
36	B4986	1	DECAL, Ground
37	93826	1	DECAL, Start Instruction
38	75477	2	SCRW, M5-0.8 x 20Lg. Phillips Hd.
39	96716	3	WASHER, Nylon
40	95921	1	LINKAGE, Bell Crank to Throttle
41	95920	1	LINKAGE, Stepper Motor to Bell Crank
42	33141	1	CAPSCREW, #10-32 x 3/4" Hex Hd.
43	51713	1	WASHER, M5 Flat
44	49226	1	WASHER, M5 Lock
45	62265	2	GROMMET, Rubber
46	A84650	1	TRAY, Battery
47	A44951	1	BAR, Battery Hold-Down
48	B4832	2	SCREW, 1/4-20" NC x 7.5" Hx Hd. Mach.
49	22097	7	WASHER, 1/4" Lock
50	22127	4	NUT, ¼ "-20 Hex
51	22261	1	SHAKEPROOF, 3/8" Internal
52	77282	1	SWITCH, Starter
53	78289	1	BRACKET, Starter Switch
54	22287	2	CAPSCREW, 1/4"-20 x 3/4"
55	90914	1	ADAPTER, Oil Filter
56	70185	1	FILTER, Oil
57	60108	1	SWITCH, Low Oil Pressure
58	40945	3	CAPSCREW, M6-1.0 x 20 Socket Hd
59	68548	1	GASKET, Oil Filter Adapter
60	73054	1	DECAL, Fuel Shut Off
61	B93841	1	SHIELD, Oil Sensor Heat
62	46852	2	TAPTITE, #10-32 x 1/4"
63	22473	2	WASHER, 1/4" Flat
64	182-53621	1	WIRE ASSEMBLY,Starter
65	196-53621	1	WIRE ASSEMBLY, Battery
66	197-53621	1	WIRE ASSEMBLY, Ground
67	96378	1	SPACER
68	96717	1	SPRING
69	52618	2	HHCS, M5 - 0.8 x 12 Lg.
70	52856	2	NUT, M5 Flange Lock
71	23897	2	WASHER, #10 - M5 Flat

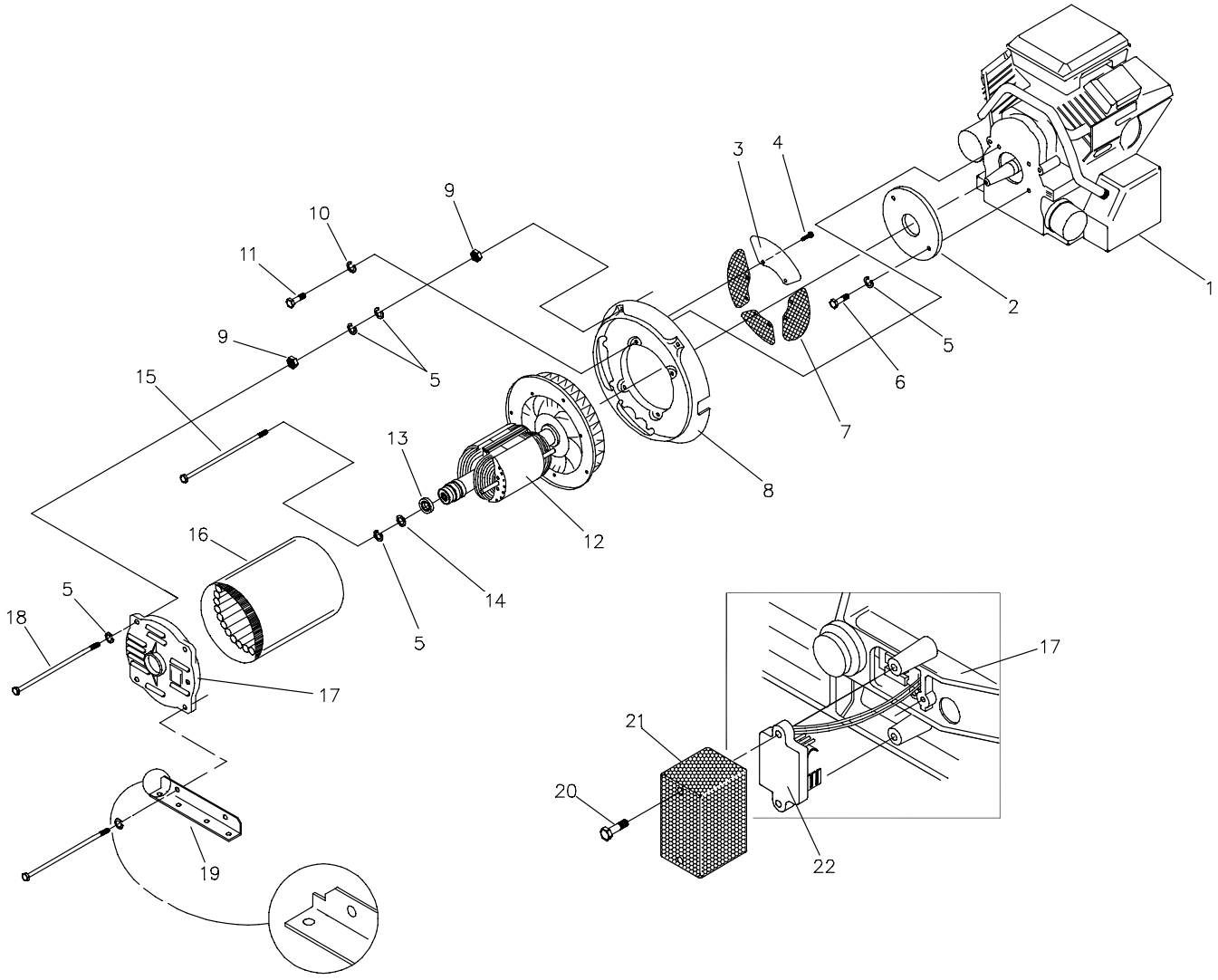
Items Not Shown

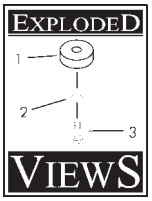
B4428	1	Generator Owner's Manual
B4572	1	Video
37806	1	125V 30A Plug
43438	1	120/240V 30A Plug
65787	1	Battery Charge Cable
93568	1	125V 30A Plug
BB3061	2	Oil Bottle (28oz)

Available Accessories

Storage Cover
Cord Wrap

ROTOR AND STATOR EXPLODED VIEW

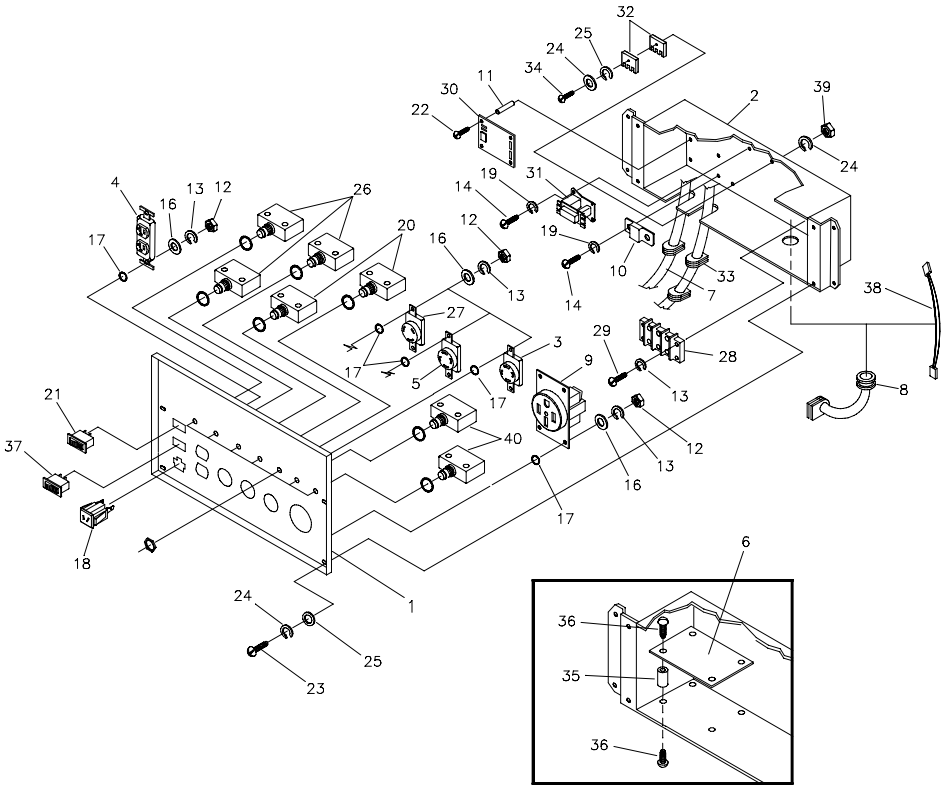




ROTOR AND STATOR PARTS LIST

Item	Part #	Qty	Description
1	NSP	1	ENGINE, Generac Power Systems
2	B55277	1	GUARD, Center
3	B71791	1	PLATE, Cover
4	46852	8	SCREW, No. 10-32 x 1/4"
5	22129	11	WASHER, 5/16" Lock
6	86307	2	CAPSCREW, 5/16"-24 x 3/4" Hex Head
7	B55275	3	GUARD, Fan
8	BB2700	1	CASTING, Adapter
9	24114	4	NUT, 5/16-24" Hex
10	22237	4	WASHER, 3/8" Lock
11	23152	4	CAPSCREW, 3/8"-16 x 3/4" Hex Head
12	92381	1	ASSEMBLY, Rotor 10-KW
13	65791	1	BEARING
14	50190	1	WASHER, 5/16" Flat
15	53365	1	CAPSCREW, 5/16"-24 x 10.75" Hex Head
16	B94983	1	ASSEMBLY, Stator 10-KW
17	B49410A	1	CARRIER, Rear Bearing
18	77324	4	CAPSCREW, 5/16"-24 x 12.25 Hex Head
19	B77303	1	SUPPORT, Alternator
20	66849A	2	SCREW, M5-0.8 x 20 Taptite
21	96423	1	SCREEN, Finger Guard
22	92769	1	ASSEMBLY, Power Regulator

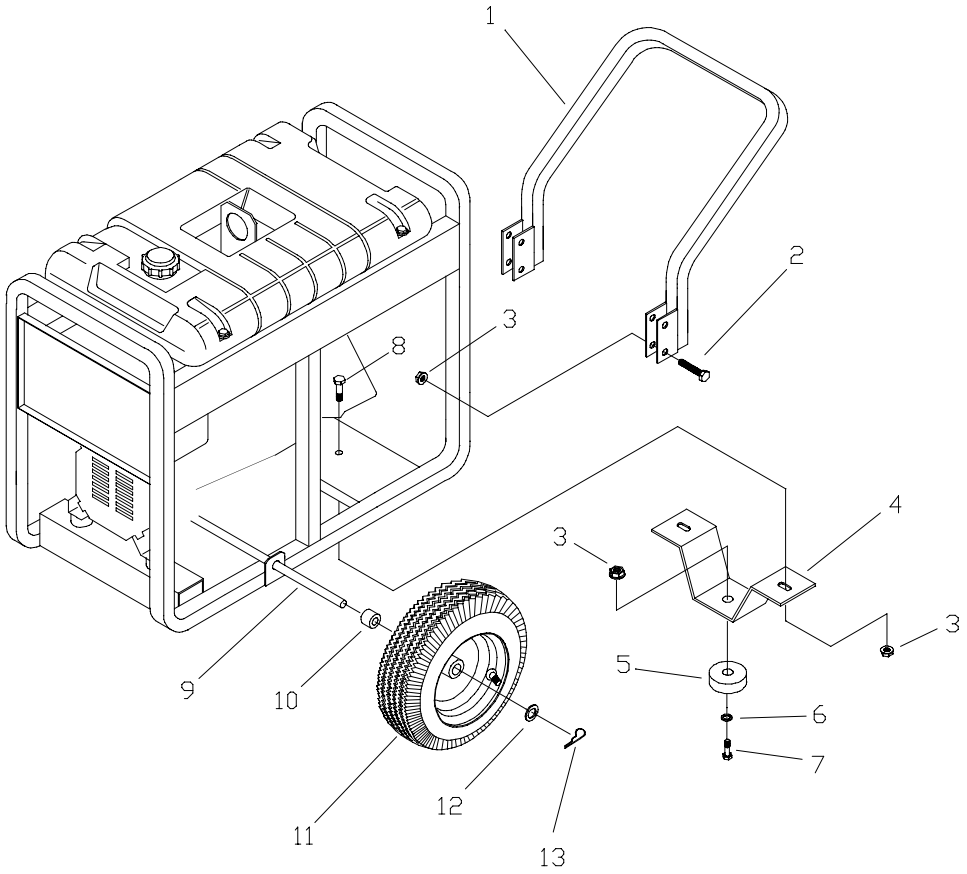
CONTROL PANEL EXPLODED VIEW AND PARTS LIST



Item	Part #	Qty	Description
1	95909	1	PANEL, Control
2	95906	1	BOX, Control
3	43437	1	OUTLET, 120/240V, 30 Amp Locking
4	68759	1	OUTLET, 120V, 20 Amp Duplex
5	68868	1	OUTLET, 120V, 30 Amp Locking
6	96476	1	BOARD, System Control
7	96067	1	ASSEMBLY, Engine Harness
8	90576	1	GROMMET, Rubber
9	B4262	1	OUTLET, 120/240V 50 Amp
10	87962	1	CIRCUIT BREAKER
11	93929	4	STAND OFF, 1/2" Hex
12	51715	12	NUT, M4 - 0.7 Hex
13	22264	16	LOCK WASHER, #8 M4
14	43181	4	SCREW, M3 - .05 x 10mm
16	38150	12	FLAT WASHER, #8
17	23365	12	WASHER, #8 Shakeproof
18	90418	1	OUTLET, 12V DC Snap
19	43182	8	LOCK WASHER, M3

Item	Part #	Qty	Description
20	75207-A	2	CIRCUIT BREAKER, 30 Amp
21	78653	1	SWITCH, Run - Stop
22	93986	4	SCREW, M3 - 0.5 x 20mm
23	91526	4	SCREW, M5 - .08 x 12mm
24	49226	5	LOCK WASHER, M5
25	23897	5	FLAT WASHER, M5
26	75207	2	CIRCUIT BREAKER, 20 Amp
27	74190	1	OUTLET, 120V/20A
28	92953	1	BLOCK, 50 Amp, 3 - Terminal
29	80077	4	SCREW, M4 x 20mm
30	94117	1	BOARD, Idle Control
31	84028	1	TRANSFORMER, Idle Control
32	65795	2	RECTIFIER, Battery Charge
33	84135	1	GROMMET, Rubber
34	20911	1	SCREW, M5 - 0.8 x 30mm
35	64525	4	STAND OFF, 3/4" Hex
36	64526	8	SCREW, #6-32 x 3/8" Tap
37	82538	1	SWITCH, On - Off
38	96471	1	ASSEMBLY, Extension Cord
39	51716	1	HEX NUT, M5 - 0.8
40	B4455	2	CIRCUIT BREAKER, 45 Amp

WHEEL KIT EXPLODED VIEW AND PARTS LIST



Item	Part #	Qty	Description
1	93393B	1	HANDLE, Wheel Kit
2	39287	4	HHCS, M8 - 1.25 x 45 Lg
3	52858	7	NUT, Locking M8 - 1.25
4	93394	1	LEG, Mounting Support
5	27007	1	MOUNT, Vibration
6	22145	1	FLAT WASHER, 5/16 - M8
7	42909	1	HHCS, M8 - 1.25 x 30 Lg.
8	39253	2	HHCS, M8 - 1.25 x 20 Lg.
9	93693B	1	AXLE, 5/8 Zinc
10	89635	2	SPACER, Wheel
11	89742	2	WHEEL, Assy 12" Dia.
12	22247	2	WASHER, Flat M8
13	87005	2	PIN, Retaining

LIMITED WARRANTY

FOR OVERHEAD VALVE V-TWIN ENGINE-DRIVEN PORTABLE GENERATORS

GENERAC PORTABLE PRODUCTS (hereafter referred to as the COMPANY) warrants to the original purchaser that all components originally equipped with the generator, excluding the engine, for its portable generator will be free from defects in materials or workmanship for the items and period set forth below from the date of original purchase. This warranty is not transferable and applies only to portable generators driven by an overhead valve V-Twin engine.

	Consumer*	**Commercial***
Alternator	2 years (2nd year parts only)	1 year
Engine	Warranted solely by the engine manufacturer	

With the exception of European Community Countries, all units bound for export shall be warranted for One (1) Year in Consumer applications, and 90 days in Commercial applications as defined below.

***NOTE: For the purpose of this warranty "consumer use" means personal residential household use by original purchaser. This warranty does not apply to units used for Prime Power in place of utility. "Commercial Use" means all other uses, including rental, construction, commercial and income producing purposes. Once a generator has experienced commercial use, it shall thereafter be considered a commercial use generator for the purposes of this warranty.**

During said warranty period, the COMPANY will, at is option, repair or replace any part which, upon examination by the COMPANY, is found to be defective under normal use and service**. Starting batteries are not warranted by the COMPANY. All transportation costs under warranty, including return to the factory if necessary, are to be borne by the purchaser and prepaid by the purchaser. This warranty does not cover normal maintenance and service and does not apply to a generator set, alternator, or parts which have been subjected to improper or unauthorized installation or alteration, misuse, negligence, accident, overloading, overspeeding, improper maintenance, repair or storage so as, in the COMPANY's judgement, to adversely affect its performance and reliability.

****NORMAL WEAR: As with all mechanical devices, the generator needs periodic parts service and replacement to perform well. This warranty will not cover repair when normal use has exhausted the life of a part or generator.**

THERE IS NO OTHER EXPRESS WARRANTY. THE COMPANY HEREBY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE TO THE EXTENT PERMITTED BY LAW. THE DURATION OF ANY IMPLIED WARRANTIES WHICH CANNOT BE DISCLAIMED IS LIMITED TO THE TIME PERIOD AS SPECIFIED IN THE EXPRESS WARRANTY. LIABILITY FOR CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES UNDER ANY AND ALL WARRANTIES IS EXCLUDED. THE COMPANY ALSO DISCLAIMS ANY RESPONSIBILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, SUCH AS THE LOSS OF TIME OR THE USE OF THE POWER EQUIPMENT, OR ANY COMMERCIAL LOSS DUE TO THE FAILURE OF THE EQUIPMENT: AND ANY IMPLIED WARRANTIES ARE LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights, which vary from state to state.

For service, see your nearest COMPANY authorized warranty service facility or call 1-877-544-0982. Warranty service can be performed only by a COMPANY authorized service facility. This warranty will not apply to service at any other facility. At the time of requesting warranty service, evidence of original purchase date must be presented.

GENERAC PORTABLE PRODUCTS
Jefferson, Wisconsin 53549